SAF-RC-001
Industrial Hygiene Sampling
FINAL DATA

NO DISTRIBUTION REQUIRED

COMMENTS:

SDG 06I-0215-01 SAF-RC-001

Rad only X Chem only Rad & Chem

X Complete Partial

300 Area 334 Trench

Cover Page

Report Identification Number: 06I-0215-01
Subcontract Number: 0000X-BO-G0058-B-Mod#4
Name of Industrial Hygienist: Denise A. Pitts / Henry W. Ruby
Laboratory Identification Number: DCHM
SAF#: RC-001 / R33400 J452
Payroll#: 72520

Sample Information

Sample Date	Customer Sample Number	Laboratory Sample Number	Method	Analytical Batch Identification	Sample Matrix
19 Jan 2006	J10XH3	06I01777	NMAM 7300M	G060M00P	G WIPE
19 Jan 2006	J10XH4	06I01778	NMAM 7300M	G060M00P	G WIPE
19 Jan 2006	J10XH5	06I01779	NMAM 7300M	G060M00P	G WIPE
19 Jan 2006	J10XH6	06I01780	NMAM 7300M	G060M00P	G WIPE
19 Jan 2006	J10XH7	06I01781	NMAM 7300M	G060M00P	G WIPE

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Name: Lisa M. Reid
Title: Chemist
Date: January 23, 2006

DATA CHEM LABORATORIES

Case Narrative Page

Report Identification Number: 06I-0215-01
Subcontract Number: 0000X-BO-G0058-B-Mod#4
Name of Industrial Hygienist: Denise A. Pitts / Henry W. Ruby
Laboratory Identification Number: DCHM
SAF#: RC-001 / R33400 J452
Payroll#: 72520

General Set Information: There are 5 samples in set 06I-0213-02, 4 samples in set 06I-0214-01 and 5 samples in set 06I-0215-01. The samples were analyzed for cadmium, lead and beryllium on Ghost Wipe. No problems were encountered with the receipt of these samples and no contact with the CTR was required.

Method Summary: Samples were transferred to 50 ml centrifuge tubes and digested in the presence of 5 mL of nitric acid and 5 mL of ASTM Type II water. Samples were digested in a hot block set at 110°C for 60 minutes. Samples were then diluted to a 25 mL volume with ASTM Type II Water. Samples were shaken and delivered for ICP analysis.

Sample Preparation: All samples were prepared in accordance with DCL SOP "IH-AN-021" and NIOSH method NMAM 7300 modified for hot block digestion.

Holding Times: The holding times were met for both sample preparation and analysis.

Instrument Calibration: Instrument calibration was performed in accordance with NIOSH method NMAM 7300.

Initial and Continuing Calibration Verification Analysis: Beryllium, cadmium and lead recoveries in all Initial Calibration Verification (ICV) and Continuing Calibration Verification (CCV) samples are within the quality control limits of +/- 10%.

Initial and Continuing Calibration Blank Analysis: No beryllium results were found in the Initial Calibration Blank (ICB) or Continuing Calibration Blanks (CCB) at levels above the Contract Required Detection Limits (CRDL) of 0.01 ug/sample. No cadmium results were found in the Initial Calibration Blank (ICB) or Continuing Calibration Blanks (CCB) at levels above the Contract Required Detection Limits (CRDL) of 0.1 ug/sample. No lead results were found in the Initial Calibration Blank (ICB) or Continuing Calibration Blanks (CCB) at levels above the Contract Required Detection Limits (CRDL) of 3. ug/sample.

Method Blank Analysis: No beryllium, cadmium or lead was found in any of the media blank samples above the Contract Required Detection Limit (CRDL).

Dilution(s): None.

Case Narrative Page

Laboratory Control Sample and Duplicate Analysis: One Laboratory Control Sample (LCS) and one Laboratory Control Sample Duplicate (LCSD) were prepared and analyzed with the sample batch. The LCS results were within the control limits of +/- 20%. The Relative Percent Difference (RPD) between the LCS and the LCSD were within the control limit of 20%.

Replicate Analysis: Two samples in this batch were replicated. The RPD between the samples and the replicates was within the control limit of 20%. If the result of the sample or replicate is below the CRDL, replicate analysis is negligible.

Flagging Codes: None

Nonconformance/Corrective Action Report (NC/CAR): N/A

Sample Calculation: The final results are calculated by the following equation:
Final result for aqueous samples (µg/sample) = (A) x (B) x (C)

Where:
A = Analyte concentration from instrument determination (µg/L)
B = Concentration factor from sample preparation
= Final Volume of Digestate (L) / Sample
C = Dilution performed at time of analysis

Example Calculation: (1 µg/L) x (0.025 L/sample) x (1) = 0.025 µg/sample

Miscellaneous Comments: None

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Report Page

Report Identification Number: 06I-0215-01
Subcontract Number: 0000X-BO-G0058-B-Mod#4
Name of Industrial Hygienist: Denise A. Pitts / Henry W. Ruby
Laboratory Identification Number: DCHM
SAF#: RC-001 / R33400 J452
Payroll#: 72520

Customer Sample Number	Laboratory Sample Number	Date Analyzed	Beryllium µg/sample		Cadmium µg/sample		Lead µg/sample	
J10XH3	06I01777	20 Jan 2006	<0.01	U	<0.1	U	<3.	U
J10XH4	06I01778	20 Jan 2006	<0.01	U	<0.1	U	<3.	U
J10XH5	06I01779	20 Jan 2006	<0.01	U	<0.1	U	<3.	U
J10XH6	06I01780	20 Jan 2006	<0.01	U	<0.1	U	<3.	U
J10XH7	06I01781	20 Jan 2006	<0.01	U	<0.1	U	<3.	U
		Limit of Detection (LOD)	0.01		0.1		3.	
		Required Detection Limit (RDL)						

U - Parameter not detected above LOD.
J - Parameter between LOD and RDL.

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QC Summary Page

Report Identification Number: 06I-0215-01
Subcontract Number: 0000X-BO-G0058-B-Mod#4
Name of Industrial Hygienist: Denise A. Pitts / Henry W. Ruby
Laboratory Identification Number: DCHM
SAF: RC-001 / R33400 J452
Payroll#: 72520

Batch ID: G060M00P

QC Sample ID	QC Type	Analyte	Units	Result	Parent Result	Target	Percent Rec.	Relative Percent Diff.
BL-240257-1	MB	Beryllium	µg/sample	ND	NA	NA	NA	NA
BL-240257-1	MB	Cadmium	µg/sample	ND	NA	NA	NA	NA
BL-240257-1	MB	Lead	µg/sample	ND	NA	NA	NA	NA
QC-240257-1	LCS	Beryllium	µg/sample	11.4	NA	10.0	114.	NA
QC-240257-1	LCS	Cadmium	µg/sample	33.9	NA	30.0	113.	NA
QC-240257-1	LCS	Lead	µg/sample	106.	NA	100.	106.	NA
QD-240257-1	LCSD	Beryllium	µg/sample	11.4	11.4	10.0	114.	0.0868
QD-240257-1	LCSD	Cadmium	µg/sample	33.5	33.9	30.0	112.	1.14
QD-240257-1	LCSD	Lead	µg/sample	105.	106.	100.	105.	0.956

MB - Method Blank
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MSD - Matrix Spike Duplicate
LD - Laboratory Duplicate

NA - Not Applicable
ND - Parameter not detected above LOD

LCS, LCSD Percent Rec. = (Result / Target) * 100.0
MS, MSD Percent Rec. = ((Result – Parent) / Target) * 100.0

LCS, LCSD Relative Percent Diff. = ((|LCS – LCSD|) / ((LCS + LCSD)/2.0)) * 100.
MS, MSD Relative Percent Diff. = ((|MS – MSD|) / ((MS+ MSD)/2.0)) * 100.
LD Relative Percent Diff. = ((|Parent – LD|) / ((Parent + LD)/2.0)) * 100

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DATA CHEM LABORATORIES

COC Page

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Washington Closure Hanford

UCL - 0215.01

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

Collector: CJ Williams	Company Contact: Denise A. Pitts and Henry W. Ruby	Telephone No.: 531-1229	Project Coordinator: Joan H. Kessner
Payroll #: 72520	Sampling Location: 300 area/334 Hunch	SPECIAL INSTRUCTIONS All relevant COAs must be provided: R33400J452	SAF No.: RC-001
Type of Sample: Wipes	Wipe Sample Media: Ghost ☑ Yes ☐ No; Other	ANALYSIS METHOD (SPECIFIC): N105H 7300	Method of Shipment: Fed Ex
Shipped To: Data chem Salt Lake city UT			Bill of Lading/Air Bill No.: 8541 9337 5340
POSSIBLE SAMPLE HAZARD/REMARKS: N/a	MATRIX: A - AIR; WI - WIPE; X - OTHER	Preservation (i.e., cooling required, etc.)	Data Turnaround: 24 hrs
Special Handling and/or Storage: Be/Cd/Pb			

SAMPLE ANALYSIS

SAMPLE NO.	MATRIX	SAMPLE DATE	VOLUME (L) or Area ____ cm²	Comments	Asbestos Airborne	Lead Airborne	Beryllium Airborne	Beryllium Wipe	Mold	Lead Wipe	Cd Wipe	Cd Airborne
					No	No	No	No	No	No	No	No
J10XH3	WI	1-19-06	100 cm²		UCL 01777			X		X	X	
J10XH4	↑	↑	100cm²				78	X		X	X	1-19-06 CJW
J10XH5			100 cm²		CJW		79	X	1-19-06 CJW	X	X	
J10XH6	↓	↓	Blanks		1-19-06		80	X		X	X	
J10XH7	WI	1-19-06	Blanks				81	X		X	X	
					CJW 1-19-06							

WCH-SH-202 (08/29/2005)

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COC Page

Enter on line below the first Sample Number from Page One:

_____

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

SIGN / PRINT NAMES / USE MILITARY TIME

Relinquished By/Signed	DATE / TIME	Received By/Signed	DATE / TIME
CJ Williams Cynthea Williams	1-19-06 1450	3746 B106 Rm16 locked cabinet	1-19-06 1450
3746 B106 Rm16 Locked Cabinet	1-19-06 ~~1515~~ 1515	John Peeples	1-19-06 ~~1615~~ 1515 01.19.06
John Peeples	1-19-06 1515	RZ Steffler R.J. Steffler	1-19-06 1575
RZ Steffler R.J. Steffler	1-19-06 1570	Fed Ex	
Fed Ex		Meredith Edwards	20 June 1000
Meredith mt	20 June 1000		

LABORATORY SECTION	Received By	Title	DATE / TIME
	Meredith Edwards		20 June 1000

REVIEWED BY: _____ DATE: _____

PRINT/SIGN NAME

WCH-SH-202 (08/29/2005)

Washington Closure Hanford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

Collector: CJ Williams	Company Contact: Denise A. Pitts and Henry W. Ruby	Telephone No.: 531-1229	Project Coordinator: Joan H. Kessner
Payroll #: 72520	Sampling Location: 300 area/334 Hunch	SPECIAL INSTRUCTIONS All relevant COAs must be provided: R33400J452	SAF No. RC-001
Type of Sample: Wipes		ANALYSIS METHOD (SPECIFIC): NIOSH 7300	Method of Shipment: Fed Ex
Shipped To: Data chem Salt Lake City UT	Wipe Sample Media: Ghost ☒ Yes ☐ No; Other		Bill of Lading/Air Bill No.: 8541 9337 5340
POSSIBLE SAMPLE HAZARD/REMARKS: N/a; Special Handling and/or Storage: Be Cd Pb	MATRIX: A - AIR; WI - WIPE; X - OTHER	Preservation (i.e., cooling required, etc.)	Data Turnaround: 24 hrs

SAMPLE NO.	MATRIX	SAMPLE DATE	VOLUME (L) or Area ____ cm²	Comments	Asbestos Airborne	Lead Airborne	Beryllium Airborne	Beryllium Wipe	Mold	Lead Wipe	Cd Wipe	Cd Airborne
					No	No	No	No	No	No	No	No
J10XH3	WI	1-19-06	100 cm²					X		X	X	
J6XH4	↑	↑	100cm²					X		X	X	1-19-06 CJW
J10XH5			100 cm²		CJW 1-19-06			X	1-19-06 CJW	X	X	
J10XH6	↓	↓	Blanks					X		X	X	
J10XH7	WI	1-19-06	Blanks					X		X	X	
					CJW 1-19-06							

COPY

FIELD SAMPLE COPY

Enter on line below the first Sample Number from Page One:

_____

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

SIGN / PRINT NAMES / USE MILITARY TIME

Relinquished By/Stored	DATE / TIME	Received By/Stored:	DATE / TIME
CJ Williams Cynthia Williams	1-19-06 / 1450	3746 Bldg Rm 16 locked cabinet	1-19-06 / 1450
3746 Bldg Rm 16 Locked Cabinet	1-19-06 / ~~1515~~ 1515	John Peoples	1-19-06 / ~~1515~~ 1515
John Peoples	1-19-06 / 1515	RZ Steffler R.J. Steffler	1-19-06 1515
RZ Steffler R.J. Steffler	1-19-06 1570	Fed Ex	

COPY

FIELD SAMPLE COPY

LABORATORY SECTION	Received By	Title	DATE / TIME

REVIEWED BY: _____ DATE: _____

PRINT/SIGN NAME